

CLAIMS

1. A front panel for plasma display, comprising:
  - a transparent substrate,
  - a first transparent adhesive layer provided on the transparent substrate,
  - an electromagnetic wave shielding layer provided on the first transparent adhesive layer,
  - a third transparent adhesive layer provided on the electromagnetic wave shielding layer, and
  - a transparent protective layer provided on the third transparent adhesive layer,
  - the electromagnetic wave shielding layer comprising a transparent substrate film, a metal layer including a mesh part having a plurality of openings that adjoin one another, formed on the transparent substrate film, and a smoothing resin layer made from a transparent synthetic resin, filling at least part of the spaces in the openings in the metal layer,
  - the smoothing resin layer and/or the third transparent adhesive layer containing a near infrared rays absorbing agent and/or a coloring agent for color tone correction.
2. The front panel for plasma display according to claim 1, wherein the smoothing resin layer and/or the third transparent adhesive layer contains both a near infrared rays absorbing agent and a coloring agent for color tone correction.
3. The front panel for plasma display according to claim 2, wherein the smoothing resin layer and/or the third transparent adhesive layer further contains a coloring agent for color tone adjustment for adjusting the color tone of a displayed image to the desired one.
4. The front panel for plasma display according to claim 1, wherein the smoothing resin layer contains a near infrared rays absorbing agent, and the third transparent adhesive layer contains a coloring agent for color tone correction.

5. The front panel for plasma display according to claim 4, wherein the third transparent adhesive layer further contains a coloring agent for color tone adjustment.
6. The front panel for plasma display according to claim 1, wherein the metal layer further includes a frame part that surrounds the mesh part, and a part of the frame part is covered neither with the smoothing resin layer, nor with the third transparent adhesive layer, nor with the transparent protective layer and is thus bare.
7. The front panel for plasma display according to claim 1, wherein the electromagnetic wave shielding layer comprises a second transparent adhesive layer between the transparent substrate film and the metal layer.
8. The front panel for plasma display according to claim 1, wherein the transparent protective layer comprises a transparent protective substrate film and an anti-reflection layer and/or an anti-glaring layer provided on the transparent protective substrate film.
9. The front panel for plasma display according to claim 1, wherein a blackening treatment layer is provided on the transparent protective layer side surface of the metal layer.
10. A plasma display comprising:
  - a front panel for plasma display, and
  - a plasma display element that faces to the front panel for plasma display,the front panel for plasma display comprising:
  - a transparent substrate,
  - a first transparent adhesive layer provided on the transparent substrate,
  - an electromagnetic wave shielding layer provided on the first transparent adhesive layer,
  - a third transparent adhesive layer provided on the electromagnetic wave shielding layer, and

a transparent protective layer provided on the third transparent adhesive layer,

the electromagnetic wave shielding layer comprising a transparent substrate film, a metal layer including a mesh part having a plurality of openings that adjoin one another, formed on the transparent substrate film, and a smoothing resin layer made from a transparent synthetic resin, filling at least part of the spaces in the openings in the metal layer,

the smoothing resin layer and/or the third transparent adhesive layer containing a near infrared rays absorbing agent and/or a coloring agent for color tone correction,

the transparent substrate of the front panel for plasma display facing to the plasma display element, an image displayed being observed from the transparent protective layer side.

11. The plasma display according to claim 10, wherein  
the smoothing resin layer and/or the third transparent adhesive layer contains both a near infrared rays absorbing agent and a coloring agent for color tone correction.
12. The plasma display according to claim 11, wherein  
the smoothing resin layer and/or the third transparent adhesive layer further contains a coloring agent for color tone adjustment for adjusting the color tone of a displayed image to the desired one.
13. The plasma display according to claim 10, wherein  
the smoothing resin layer contains a near infrared rays absorbing agent, and the third transparent adhesive layer contains a coloring agent for color tone correction.
14. The plasma display according to claim 13, wherein  
the third transparent adhesive layer further contains a coloring agent for color tone adjustment.
15. The plasma display according to claim 10, wherein  
the metal layer further includes a frame part that surrounds the

mesh part, and a part of the frame part is covered neither with the smoothing resin layer, nor with the third transparent adhesive layer, nor with the transparent protective layer and is thus bare.

16. The plasma display according to claim 10, wherein the electromagnetic wave shielding layer comprises a second transparent adhesive layer between the transparent substrate film and the metal layer.

17. The plasma display according to claim 10, wherein the transparent protective layer comprises a transparent protective substrate film and an anti-reflection layer and/or an anti-glaring layer provided on the transparent protective substrate film.

18. The plasma display according to claim 10, wherein a blackening treatment layer is provided on the transparent protective layer side surface of the metal layer.